

Progressive evolution

The evolving Development Process Excellence Initiative is shifting focus to better serve Boeing's growth and productivity goals. **by William Cole**

Progress leads to change, and change can lead to further progress. That's the strategy the Development Process Excellence (DPE) Initiative is following as it progressively evolves from a focus on improving Boeing's R&D yield and program management efficiency to a focus on helping establish standard processes, systems and training for the enterprise.

When the DPE Initiative was first established, it was focused on three key areas, explains DPE Initiative leader John Pricco:

Enterprise Technology – focused on finding ways to maximize the yield of Boeing's technology investments and the readiness of technology needed for development programs.

Lab and Test Assets – focused on determining a maximally efficient set of internal and external test resources consistent with ensuring top program performance.

Product Development and Large-scale Systems Integration – focused on improving the efficiency and effectiveness of development programs by identifying and applying best practices and lessons learned, as well as establishing more standard processes, and systems and training across the enterprise.

"Progress in each of these areas has led to positive changes in the company as well as changes within the Initiative itself," says Pricco. "Effort in all three areas has been either totally or partially woven into the fabric of the company, where further progress can be made."

The Enterprise Technology task has been transitioned to the role of the Chief Technology Officer (CTO), the Lab and Test Assets task has been transitioned to the Lean+ Initiative, and a major aspect of the Product Development and Large-scale Systems Integration task has been transitioned to the business units."

"As a result of all that positive change, the focus of the DPE Initiative is narrowing on a key foundational element for streamlining the Program Management, Engineering, Operations and Supplier Management functions of the company – standard processes, systems and training," says Pricco.

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Summary of progress

Since January 2006, the various DPE Initiative teams have been working to make real progress. For example, the Initiative's Enterprise Technology team conducted benchmarking studies to determine how best to increase the yield of R&D across the enterprise. The result was a proposal to institutionalize the role of the Chief Technology Officer as leader of an enterprise team to develop an Enterprise Technology Strategy. This role of the CTO has since been formalized to lead the Enterprise Technology Board in developing and implementing an Enterprise Technology Strategy. As a result, this element of the Initiative was completely transitioned to the CTO for further implementation and advancement.

During this time, the Lab and Test Assets team was conducting its own studies on how to make more efficient use of Boeing's assets both internally and externally. Members of the team toured the company to look at how little-used or unused assets could be consolidated and which could be improved and used more efficiently. Using lean principles, the team has helped to shape common processes for regional test-equipment management and has closed various little-used or unused lab and test assets and developed plans for further improvement. Because of this lean approach, this element recently moved to the Lean+ Initiative allowing it to more effectively pursue its goals.

Meanwhile, the Product Development and Large-scale Systems Integration and Development team has been conducting benchmarking studies with regard to Boeing development programs and how to run them more efficiently and effectively. Much of this benchmarking effort has been completed. Also in support of this element – as well as in support of the various functions at EO&T – an enterprise team was formed to analyze how best to identify and implement common processes and systems for these enterprise functions.

With this element nearly complete, it was decided that the DPE Initiative would continue to play an important enterprise role by helping the business units establish common processes, systems and training that are consistent with a single enterprise architecture and with as much cross-enterprise commonality as possible. And it will continue to play the same role in helping the enterprise Engineering, Operations and Supplier Management functions achieve the same goal.

The new focus of the Initiative

"The DPE Initiative is an important part of Boeing's journey toward more growth and productivity," says John Tracy, senior vice president of Engineering, Operations & Technology and Boeing CTO.

"Our overall goal, along with the other three Initiatives, is to continue to help Boeing to become more competitive," he says. "We can best do that by focusing our attention on a critical element of business success – promoting real efficiencies by having everyone speak the same technical language and work together through standardized and common processes, systems and training."

Pricco says the Initiative has already made progress in working with the business and functional leaders and ultimately will resolve a long-standing challenge associated with having a varied set of processes, systems, and training for accomplishing the company's work.

He says the Initiative has already logged some notable achievements. The Initiative's Executive Steering Team is already reviewing the status of developing business unit plans and their approaches to long-range business planning. The Initiative is also working to ensure a consolidated enterprise view and assessing whether business unit plans and consolidations are consistent with enterprise standard solutions.

Main changes to the Development Process Excellence Initiative

- The Enterprise Technology Team has been transitioned to the CTO organization.
- The Lab and Test Assets team has been moved into the Lean+ Initiative.
- The DPE Product Development/Large-scale Systems Integration best practices study will be completed.
- The Initiative is now focused on planning and implementation of Engineering, Operations & Technology's common processes, systems and training.

"This will engage functions and business units to provide standard service-ready solutions for improved program performance," Pricco says. "A standard set of processes, systems and training will allow programs to plan, execute, monitor, manage, and control more effectively. This standardization will lead to strengthened program performance through improved functional integration and discipline. Because of the strategic importance of this standardization endeavor, an accelerated approach has already begun with funding allocated to several projects."

In addition, he says, "Standardization will allow us to more easily move work to people rather than people to work. Programs will have access to the right engineering talent at the right time with the right technology. Operations will be improved by efficient "design-anywhere, build-anywhere" processes, systems, and training, and by the availability of production data where it's needed, when it's needed. Boeing will increase its ability to buy anywhere, using common processes and integrated systems, thereby lowering costs, improving quality and efficiency, and speaking to suppliers with one voice.

Pricco points out that all of us have an opportunity to make a contribution. "Employees can help," he says, "by looking within their functions and helping to review, capture, and classify processes, systems, and training that are redundant, obsolete or non-standard. That will help us in our effort to migrate to a streamlined set of common processes, systems, and training courses. Standardized processes, systems and training will promote best practices, Lean principles, ISO and other common Initiatives.

"Enterprisewide, standardized processes, systems and training will facilitate the movement of work across the enterprise to where it's best performed and foster an IT environment that is agile, adaptive, and flexible. It will essentially allow us to work together globally as one team, 24 hours a day, 7 days a week

"This and the simplification and streamlining of our systems will ultimately benefit Boeing customers and enhance our competitive edge." ■

John Pricco | at a glance

Current position: vice president Development Process Excellence initiative, Engineering, Operations & Technology.

History: Assumed leadership of the DPE Initiative in November 2006. Prior to that was director of Engineering for the 747/767/777 programs, 777 chief project engineer and director of Customer Engineering for Boeing Commercial Airplanes. Held various management positions in Boeing's Aircraft Systems and Interiors organization. Joined Boeing in 1981 as a liaison engineer after completing an engineering internship.

Education: Bachelor of science degree in mechanical engineering from Washington State University, a master's in business administration from the University of Washington and completed the Seattle University Executive Leadership Program.

Organizations: Board member of Snohomish County Junior Achievement 2003 through 2006; member of Gonzaga Engineering Advisory Council from 2003 through 2007; Auction co-chair for Work Opportunities (an organization providing job training and support for the disabled) in 2005 and 2006; Executive Focal for Washington State University; Advisory Board member for WSU Engineering department.



John Pricco: "We must remain adaptable to shifting circumstances and conditions."

Programs such as the Airborne Laser (ABL) – military aircraft based on commercial platforms – will benefit from common processes and systems. The ABL is based on a modified version of the 747-400F.